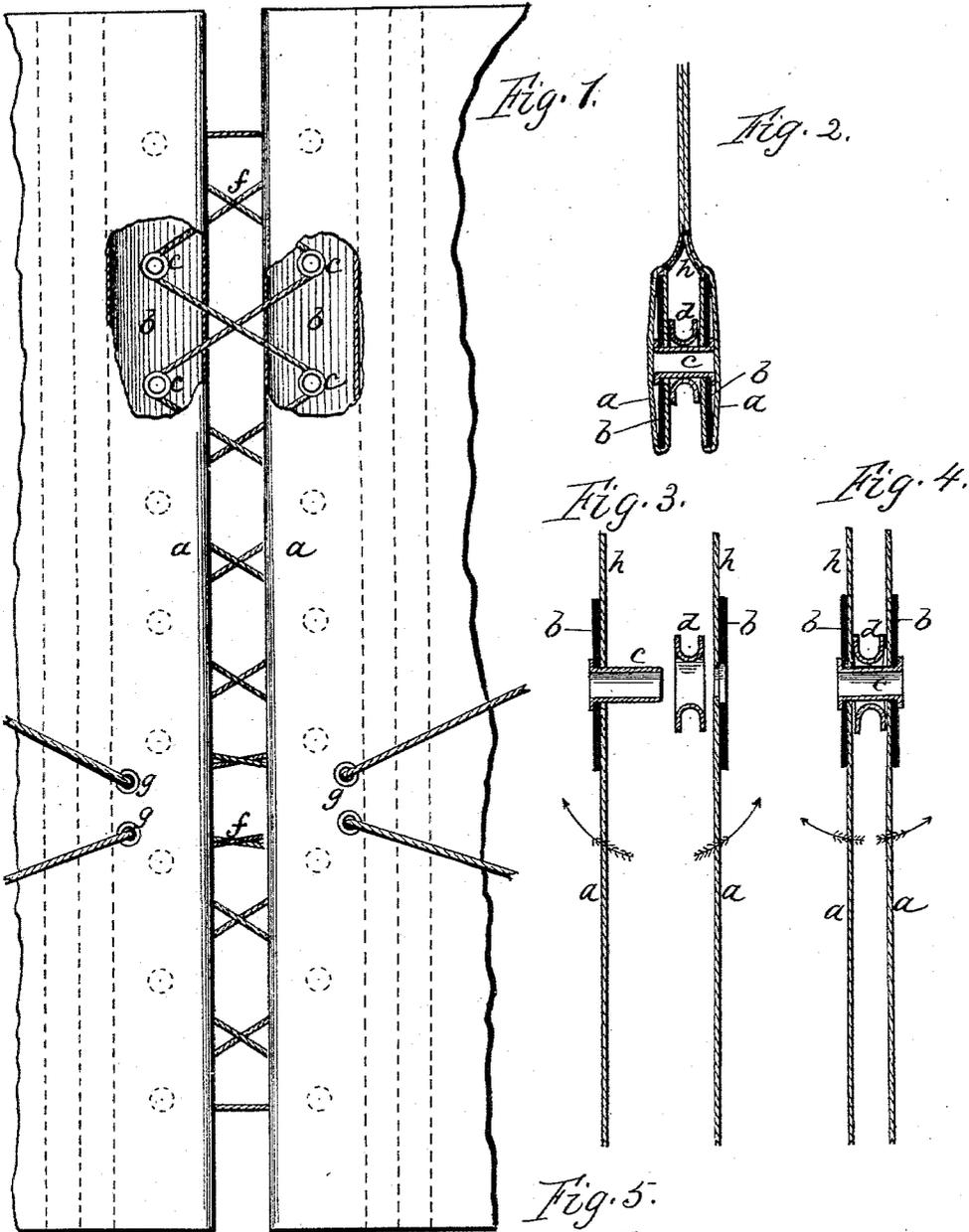


(No Model.)

A. R. COLTON.
INVISIBLE LACING.

No. 571,749.

Patented Nov. 24, 1896.



Witnesses:

C. R. Osgood.
J. J. Culver

Fig. 5.



Albert R. Colton, Inventor.
per R. F. Osgood,
Attorney.

UNITED STATES PATENT OFFICE.

ALBERT R. COLTON, OF ROCHESTER, NEW YORK.

INVISIBLE LACING.

SPECIFICATION forming part of Letters Patent No. 571,749, dated November 24, 1896.

Application filed August 9, 1895. Serial No. 558,713. (No model.)

To all whom it may concern:

Be it known that I, ALBERT R. COLTON, of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Invisible Lacings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings accompanying this application.

My improvement relates to lacings in which the bearings around which the lacing-cord passes are inclosed between double flies or flaps, also to that class in which stiffeners or stays are embedded in the flies to preserve the form of the garment.

It further relates to that class in which eyelets are used in forming the bearings. The object is to pass the eyelets directly through holes punched in the stiffeners or stays, so that, in addition to forming bearings for the lacing-cord, the eyelets attach the stays in place. In ordinary lacings now in use the cord-bearings are separate and distinct from the stiffeners or stays and the latter are slid down into pockets after the garment has been stitched. In my invention this cannot be done, but the stays must be attached before the stitching is finally completed. Hence I employ a particular method of attaching them in place.

In the drawings, Figure 1 is a face view of the two lacing edges of a garment, parts being broken away to show the interior construction. Fig. 2 is an enlarged cross-section of the same. Fig. 3 is a similar view showing one step in the operation of attaching the parts together. Fig. 4 is a similar view showing another step in the operation. Fig. 5 is an enlarged end view of one of the eyelets and the roller that rests thereon.

a a indicate the two flies or flaps on each side of the lacing.

b b are the stiffeners or stays, which are usually made of thin metal, but may be made of any suitable material. These stiffeners lie alongside the lacing edge and are embedded within the fabric and are punched with a series of holes corresponding in number with the number of eyelets used.

c c are the eyelets, extending through holes punched in both stiffeners and through one thickness of the fabric on each side. The

ends of the eyelets are then secured in any suitable manner to the outer face of the stiffeners. The stiffeners being now secured in proper position the wide free edges of the fabric are folded back, thereby covering the stiffeners and also the then exposed end of the eyelets *c*. It will thus be seen that instead of the serial eyelets being in contact with the garment which lies next to them, thus wearing and in many cases staining the same from perspiration, the smooth surfaces of the flies cover their ends and are also presented to the garment, thus avoiding all former inconveniences.

d d are rollers, similar in shape to pulleys, resting on the eyelets between the stiffeners and between the inner layers of cloth covering the stiffeners and running freely. The lacing-cord *f* passes around these rollers from side to side, as shown in Fig. 1.

Since the stiffeners or stays cannot be run down into pockets in the usual way, I employ a particular method of attachment, which is as follows: One layer of the cloth is extended in a straight length, as shown at the left in Fig. 3, and one of the stiffeners *b* is laid alongside, with the punch-holes of the stiffener and the cloth coinciding, and a series of the eyelets *c c* are then inserted through all the punch-holes ready to be headed up. A corresponding series of the rollers *d d* are then placed on the straight ends of the eyelets. The other stiffener is then placed outside the other layer of cloth, as shown at the right in Fig. 3, and this stiffener and layer of cloth are placed over the projecting ends of the eyelets, inclosing the rollers, which then rest between the stiffeners and between the two layers of cloth. When this is done, the projecting ends of the eyelets are all headed up by a proper tool, fastening all the parts together, as shown in Fig. 4. The final step consists in folding back the wide edges of the cloth in the direction indicated by the arrows, thereby covering the outside of the stiffeners and the ends of the eyelets and excluding them from sight, as shown in Fig. 2. The only eyelets exposed to sight are those through which the ends of the lacing-cord pass, as shown at *g g*. These may be either at the center or at the bottom, accordingly as a double or a single cord is used. A margin

is left on each edge of the cloth, over which the wide edge folds, said margin serving to receive the stitching that secures the cloth in place.

5 It is well known that the stiffeners now in use are inserted in pockets made in the edge of garments for that purpose and that by constant strain they become loose and the garment torn. I seek to avoid this difficulty
10 by securing the stiffeners firmly in place by a series of eyelets which pass through both layers of fabric, thereby causing an equal strain on both sides, from which it will be seen that it is impossible for the stiffener to
15 become loose or for the fabric to become torn.

This invention is applicable to all lacings where double flies and eyelets are used.

Having described my invention, I do not claim, broadly, stiffeners inserted in the flies
20 nor eyelets attached to the fabric and provided with rollers.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a corset, a lacing edge consisting of
25 two separated flies, stiffeners on the outer faces of the same at some distance from their edges extending their entire length and provided with a series of registering holes, and

eyelets passing from side to side through the holes in the stiffeners and through the inter-
posed flies, the ends of the eyelets being se- 30
cured to the outer face of the stiffeners and the flies being turned back so as to cover the exterior of the stiffeners and the ends of the
35 eyelets, as and for the purpose set forth.

2. In a corset, a lacing edge consisting of two flies, stiffeners on the outer faces of the same at some distance from their edges extending their entire length and provided with
40 a series of registering holes, eyelets passing from side to side through the holes in the stiffeners and through the interposed flies, the ends of the eyelets being secured to the outer face of the stiffeners and a grooved
45 pulley journaled on the shank of each eyelet between the inner faces of the flies, the latter being turned back so as to cover the exterior of the stiffeners and the ends of the
eyelets, as and for the purpose set forth.

In witness whereof I have hereunto signed
50 my name in the presence of two subscribing witnesses.

ALBERT R. COLTON.

Witnesses:

R. F. OSGOOD,

GEO. A. GILLETTE.